

Amendments to the Claims:

The listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

Claims 1 – 2 (cancelled)

Claim 3. (previously presented) A plasma resistant seal comprising a plasma seal made of a material provided with a plasma resisting performance, the plasma seal being provided in a plasma irradiating side of a packing made of a rubber-like elastic material and serving as a main seal,

wherein a plasma seal installation groove, which is shallower than a depth of a packing installation groove provided in an installation member, is next to a plasma irradiation side of said packing installation groove;

wherein the packing is attached to said packing installation groove; and

wherein the plasma seal, which has a flat surface for engaging a compressing member and rectangular cross sectional shape with longitudinal sides being along a plasma irradiation direction, is attached to said plasma seal installation groove in a compressed state;

so that the packing is prevented from protruding into a gap at the plasma irradiation direction.

Claim 4. (previously presented) A plasma resistant seal comprising a plasma seal made of a material provided with a plasma resisting performance, the plasma seal being provided in a plasma irradiating side of a packing made of a rubber-like elastic material and serving as a main seal,

wherein the packing is attached to a packing installation groove provided in an installation member, and the plasma seal is attached to a plasma irradiation side of the same installation groove in a compressed state;

wherein the plasma seal has a rectangular cross sectional shape; and
wherein longitudinal sides of the plasma seal are arranged along a direction orthogonal to a plasma irradiation direction;
so that the packing is prevented from protruding into a gap at the plasma irradiation direction.

Claim 5. (previously presented) A plasma resistant seal comprising a plasma seal made of a material provided with a plasma resisting performance, the plasma seal being provided in a plasma irradiating side of a packing made of a rubber-like elastic material and serving as a main seal,

wherein a plasma seal installation groove, which is shallower than a depth of a packing installation groove provided in an installation member, is next to a plasma irradiation side of said packing installation groove;

wherein the packing is attached to said packing installation groove; and

wherein the plasma seal, which has an arch cross sectional shape with its concave surface facing a bottom surface of said plasma seal installation groove, is attached to said plasma seal installation groove in a compressed state;

so that the packing is prevented from protruding into a gap at the plasma irradiation direction.

Claim 6. (previously presented) A plasma resistant seal comprising a plasma seal made of a material provided with a plasma resisting performance, the plasma seal being provided in a plasma irradiating side of a packing made of a rubber-like elastic material and serving as a main seal,

wherein the packing is attached to a packing installation groove provided in an installation member, and the plasma seal is attached to a plasma irradiation side of the same installation groove in a compressed state;

wherein the plasma seal has an arch cross sectional shape with its concave surface engaging the packing and its convex surface engaging the plasma irradiation side of the packing installation groove; and

wherein the convex and conclave surfaces of the plasma seal are arranged along a direction generally orthogonal to a plasma irradiation direction;

so that the packing is prevented from protruding into a gap at the plasma irradiation direction.

Claim 7. (previously presented) The plasma resistant seal according to claim 3, wherein the plasma seal is made of polytetrafluorethylene and the packing is an O-ring.

Claim 8. (previously presented) The plasma resistant seal according to claim 4, wherein the plasma seal is made of polytetrafluorethylene and the packing is an O-ring.

Claim 9. (previously presented) The plasma resistant seal according to claim 5, wherein the plasma seal is made of polytetrafluorethylene and the packing is an O-ring.

Claim 10. (previously presented) The plasma resistant seal according to claim 6, wherein the plasma seal is made of polytetrafluorethylene and the packing is an O-ring.

Claim 11. (new) An apparatus for manufacturing a semiconductor device by irradiating plasma with using a plasma resistant seal, said plasma resistant seal comprising a plasma seal made of a material provided with a plasma resisting performance, the plasma seal being provided in a plasma irradiating side of a packing made of a rubber-like elastic material and serving as a main seal,

wherein a plasma seal installation groove, which is shallower than a depth of a packing installation groove provided in an installation member, is next to a plasma irradiation side of said packing installation groove;

wherein the packing is attached to said packing installation groove; and

wherein the plasma seal, which has a flat surface for engaging a compressing member and rectangular cross sectional shape with longitudinal sides being along a plasma irradiation direction, is attached to said plasma seal installation groove in a compressed state;

so that the packing is prevented from protruding into a gap at the plasma irradiation direction.

Claim 12. (new) An apparatus for manufacturing a semiconductor device by irradiating plasma with using a plasma resistant seal, said plasma resistant seal comprising a plasma seal made of a material provided with a plasma resisting performance, the plasma seal being provided in a plasma irradiating side of a packing made of a rubber-like elastic material and serving as a main seal,

wherein the packing is attached to a packing installation groove provided in an installation member, and the plasma seal is attached to a plasma irradiation side of the same installation groove in a compressed state;

wherein the plasma seal has a rectangular cross sectional shape; and

wherein longitudinal sides of the plasma seal are arranged along a direction orthogonal to a plasma irradiation direction;

so that the packing is prevented from protruding into a gap at the plasma irradiation direction.

Claim 13. (new) An apparatus for manufacturing a semiconductor device by irradiating plasma with using a plasma resistant seal, said plasma resistant seal comprising a plasma seal made of a material provided with a plasma resisting performance, the plasma seal being provided in a plasma irradiating side of a packing made of a rubber-like elastic material and serving as a main seal,

wherein a plasma seal installation groove, which is shallower than a depth of a packing installation groove provided in an installation member, is next to a plasma irradiation side of said packing installation groove;

wherein the packing is attached to said packing installation groove; and

wherein the plasma seal, which has an arch cross sectional shape with its concave surface facing a bottom surface of said plasma seal installation groove, is attached to said plasma seal installation groove in a compressed state;

so that the packing is prevented from protruding into a gap at the plasma irradiation direction.

Claim 14. (new) An apparatus for manufacturing a semiconductor device by irradiating plasma with using a plasma resistant seal, said plasma resistant seal comprising a plasma seal made of a material provided with a plasma resisting performance, the plasma seal being provided in a plasma irradiating side of a packing made of a rubber-like elastic material and serving as a main seal,

wherein the packing is attached to a packing installation groove provided in an installation member, and the plasma seal is attached to a plasma irradiation side of the same installation groove in a compressed state;

wherein the plasma seal has an arch cross sectional shape with its concave surface engaging the packing and its convex surface engaging the plasma irradiation side of the packing installation groove; and

wherein the convex and concave surfaces of the plasma seal are arranged along a direction generally orthogonal to a plasma irradiation direction;

so that the packing is prevented from protruding into a gap at the plasma irradiation direction.

Claim 15. (new) The apparatus according to claim 11, wherein the plasma seal is made of polytetrafluorethylene and the packing is an O-ring.

Claim 16. (new) The apparatus according to claim 12, wherein the plasma seal is made of polytetrafluorethylene and the packing is an O-ring.

Claim 17. (new) The apparatus according to claim 13, wherein the plasma seal is made of polytetrafluorethylene and the packing is an O-ring.

Claim 18. (new) The apparatus according to claim 14, wherein the plasma seal is made of polytetrafluorethylene and the packing is an O-ring.